

NAVAL POSTGRADUATE SCHOOL

Monterey, California



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**TESTING THE STATUTORY COHERENCE HYPOTHESIS:
THE IMPLEMENTATION OF THE MARITIME SECURITY
ACT OF 1996**

by

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IMPLEMENTATION OF THE MARITIME SECURITY ACT OF 1996**

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requirements for the degree of

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ABSTRACT

Federal maritime policy has evolved as an accumulation of statutes and administrative programs intended to respond to global and domestic issues and trends within the maritime industry. The Maritime Security Act of 1996 (MSA) amended the Merchant Marine Act of 1936 in an attempt to revitalize the U.S.-flag merchant marine. The cornerstone of the MSA is the Maritime Security Program, which replaced the legacy Operating Differential Subsidy by compensating U.S. carriers for the higher costs of operating ships under a U.S.-flag compared to those of foreign-flag competitors. This thesis analyzes the MSA using a policy analysis framework developed by Sabatier and Mazmanian. The analysis identifies and evaluates critical variables affecting the achievement of statutory objectives. The absence of clearly defined objectives gives rise to inherent difficulty when attempting to measure what specifically constitutes attainment of MSA statutory success. The principle causal linkage between government intervention and the attainment of the legislative objective is through the provision of monetary subsidies. The study concludes that the MSA is a short-term policy that represents the continuation of a “bandage” solution to the hemorrhaging of U.S.-flag vessels to more profitable foreign registries and is not achieving its objective of revitalizing the U.S. merchant marine.

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I. INTRODUCTION

Federal maritime policy has evolved as an accumulation of legislative statutes and administrative programs that have been tailored by the U.S. government in an attempt to respond to specific global and domestic issues and trends within the maritime industry. The Shipping Act of 1916, which was passed in anticipation of entry into World War I, opened an era in which the federal government funded, regulated, and dominated the U.S. merchant marine. The Merchant Marine Act of 1920 defined the maritime goals of the U.S.: “It is hereby declared the policy of the United States to do whatever may be necessary to develop and encourage the maintenance of a merchant marine ... sufficient to carry the greater portion of its commerce and serve as a naval or military auxiliary in time of war or national emergency, ultimately to be owned by citizens of the United States.” Section 27 of this Act, known as the Jones Act, is best known for strengthening the existing domestic waterborne coastal shipping laws.

The U.S. Maritime Commission was established as an independent agency by the passage of the Merchant Marine Act of 1936, to further develop and maintain a merchant marine for the promotion of U.S. commerce and defense. The Commission was authorized to regulate U.S. ocean commerce, supervise freight and terminal facilities, and administer government funds to construct and operate commercial ships. Since the conception of the U.S. Maritime Commission, the government has maintained an active interest and involvement in maintaining a U.S.-flag merchant marine fleet. This rationale for supporting the U.S. maritime industry continues to this day.

The tenets of the Merchant Marine Act of 1936 have evolved into the cornerstones of U.S. maritime policy. The Operating Differential Subsidy (ODS) was the single most significant feature of this Act in recognizing and offsetting the higher costs associated with operating ships under a U.S. flag.

The Maritime Security Act of 1996 (MSA) significantly amended the Merchant Marine Act of 1936 in an attempt to revitalize the U.S.-flag merchant marine fleet. It mandated the Secretary of Transportation to “establish a fleet of active, military useful, privately-owned vessels to meet national defense and other security requirements and

maintain a U.S. presence in international community shipping.” (Public Law 104-239) The cornerstone of the MSA is the Maritime Security Program (MSP). The MSP was designed and implemented to assure the viability of a U.S.-flag merchant marine fleet capable of maintaining a role in international commercial shipping and meeting the sealift needs of the United States during national emergencies. The MSP, a ten-year program scheduled to expire in 2005, has largely replaced the ODS program which compensated U.S. carriers on a reimbursable basis for the higher costs of operating ships under the U.S. flag as compared to those of foreign-flag competitors. Congress established MSP funding levels at fixed amounts well below that of the ODS.

A. OBJECTIVE

The objective of this thesis is to analyze the impact and effectiveness of the MSA in revitalizing the U.S.-flag merchant marine fleet. Additionally, the development of U.S. maritime policy is examined in order to understand the events and concerns behind the government’s current policy of actively maintaining a merchant marine fleet and the use of subsidies. Contemporary U.S. maritime policy is rooted in laws and policies enacted in the early 1900s. Beginning in the early 1900s, U.S. maritime policy has been, in part, designed to dampen the boom-bust cycles that have characterized the history of the U.S. maritime industry. The primary means by which the U.S. influences its domestic maritime industry is through legislation. The purpose of this research is to provide a comprehensive examination to determine if current maritime legislation and policy is an effective tool in revitalizing the U.S.-flag merchant marine fleet.

B. RESEARCH QUESTIONS

Primary Question: What has been the impact of the passage of the MSA on the U.S.-Flag merchant marine fleet?

Supporting Question 1: What is the ability of the MSA to structure implementation and what are the non-statutory variables affecting implementation?

Supporting Question 2: What are the policy outputs of the MSA and their resulting impacts?

Supporting Question 3: What other vessel operating assistance programs and maritime policies, besides providing a subsidy, are available to U.S. policy makers in

creating an environment conducive to sustaining a viable U.S.-flagged merchant marine fleet?

Supporting Question 4: Should the MSA be extended beyond 2005? If so, what changes, if any, would be appropriate?

C. SCOPE AND LIMITATIONS

The research will analyze the impact and effectiveness of the MSA, changes in the composition of the U.S.-flag merchant marine fleet since its passage, and current Maritime Administration policies and initiatives to determine if the goals and intents of the Act are being met.

The nation's maritime industry composes many elements and various interest groups, complicating the issue of policy reform. Throughout U.S. history, the federal government has attempted to tailor its maritime policy to meet the needs and concerns of customer shippers, domestic vessel operators, international vessel operators, subsidized and unsubsidized carriers, shipyards, labor organizations, and national security interests. To analyze and evaluate the impact of the MSA on the U.S.-flag merchant marine fleet, the subject of maritime policy in this thesis will focus on international carriers and vessel operating assistance programs. The use of commercial sealift for sustaining military operations is also addressed as it relates to the U.S.-flag merchant marine fleet. It does not discuss operating agreements with NATO countries and Effective U.S. Controlled (EUSC) vessels.

D. METHODOLOGY

The thesis will examine the impact and effectiveness of the MSA, focusing on the statute's ability to structure implementation and the non-statutory variables affecting implementation. The independent variable then, is the MSA. Dependent variables include the policy outputs and their resulting impacts. An exploratory conceptual framework for analysis by Paul A. Sabatier and Daniel Mazmanian is used to evaluate the implementation of policy. (Sabatier 1995) Data for the study were obtained through a comprehensive review of congressional hearings and reports, Maritime Administration publications, GAO reports, government publications, books, maritime periodicals, legislative periodicals, and newspapers.

E. ORGANIZATION

Chapter II, “U.S. Maritime Policy Leading to the Passage of the Maritime Security Act of 1996,” provides a historical background of government policy and involvement in the maritime industry leading to the passage of the MSA.

Chapter III, “Conditions Influencing Policy Implementation,” examines the statute’s ability to structure implementation and the non-statutory variables affecting implementation. It then details the various policy elements that emerged as a result of its passage.

Chapter IV, “Tractability and Implementation Stages,” evaluates the resulting impacts of the MSA policy elements on the U.S.-flag merchant marine fleet.

Chapter V, “Summary and Conclusions,” summarizes the impact and effectiveness of the MSA and the analysis provided in the previous chapters. Follow-on proposals for the MSA are addressed along with areas for further research.

F. EXPECTED BENEFITS OF THIS THESIS

This thesis is intended to show the impact of current maritime legislation and policy on the U.S.-flag merchant marine fleet. The critical review of the Maritime Security Act of 1996 will provide maritime policy personnel and Congress with relevant information to support decisions with regard to future legislation and policy.

II. U.S. MARITIME POLICY LEADING TO THE PASSAGE OF THE MARITIME SECURITY ACT OF 1996

A. INTRODUCTION

The American shipping and shipbuilding industries trace their roots to the very inception of the U.S., having played key roles in transforming a fledgling nation into a military and economic superpower. Federal maritime policy has evolved as an accumulation of statutes and administrative programs that have been tailored by the United States government in an attempt to respond to specific global and domestic issues and trends impacting the maritime industry.

The Department of Transportation (DOT), typically acting through its Maritime Administration (MARAD), is the implementing agency for legislative programs that affect the movement of people and cargo in domestic and international waterborne commerce to promote America's growth and international competitiveness.

B. ORIGINS OF A MARITIME POLICY

The onset of World War I in Europe threw international trade into turmoil. At the time, 92 percent of American trade was carried by foreign ships, mainly British (58 percent) and a combination of German and Austrian (15 percent). (De La Pedraja 1992, p. 47) Much of the country's agricultural and industrial output was produced for foreign markets. Foreign shipping provided the nation's primary links with these customers. An elongated era of peace and prosperity had falsely convinced the nation that there would always be sufficient ships to carry its products and goods. The warning that Thomas Jefferson had conveyed to Congress over a century earlier in 1793, when serving as the first Secretary of State, had been either forgotten or ignored: "When those nations who may be our principal carriers shall be at war with each other, if we have not within ourselves the means of transportation, our products must be exported in belligerent vessels at increased expense, or perish on our hands." (Gibson 2000, p. 103) In 1914, the conditions that Jefferson forewarned against materialized.

Great Britain, France and Italy immediately diverted much of their shipping to supporting their war efforts. German and Austrian shippers ceased operations. The sudden scarcity of carriers drove up freight rates and the threat posed by German U-boats

sent insurance premiums soaring. Shipping costs on trade routes that crossed war zones increased as much as 700 percent. (Zeis 1938, p. 85)

The rise in world shipping costs and American vulnerability to disruptions in overseas shipping wreaked havoc in major sectors of U.S. farming and industry. U.S. exports to Europe virtually ceased and much of the nation's transportation system and the economy it served came to a standstill. While the U.S. was not yet at war, its economy was being cordoned off.

President Wilson and Treasury Secretary William McAdoo took prompt action in an attempt to address the crises by introducing legislation establishing a Bureau of War Risk Insurance to underwrite potential losses of American ship owners. At the same time, U.S. neutrality at this point suddenly made sailing under a U.S. flag highly attractive. Ship owners responded swiftly to these changes and over half of the five hundred thousand tons of American-owned foreign flagged shipping switched to a U.S. flag. (Gibson 2000, p. 105)

In preparation for entry into the war and against significant opposition from anti-government businessmen, the Shipping Act of 1916 was passed. This legislation opened an era in which the federal government funded, regulated and dominated the U.S. merchant marine. The Act created a five-man Shipping Board with authority to acquire and operate a government fleet. The significance of this legislation was that for the first time, the U.S. had one single authoritative agency to manage maritime issues that was also endowed with funds to face the shipping crises of World War I.

The shipping difficulties of the time were compounded as the U.S. entered the war in April 1917. This change further strained the flailing maritime industry with demands to carry and supply U.S. troops overseas. Under Wilson's leadership, and with enormous resources made available by the nation's burgeoning industrial economy, the U.S. set out on an intensive shipbuilding effort.

As this tremendous effort began to build momentum, the war came to an unexpected and sudden end in November 1918. In under two years time the Emergency Fleet Corporation, a subsidiary of the Shipping Board, had laid the keels of 1,429 vessels but had only delivered 470 completed ships. (De La Pedraja 1992, p. 58)

A post World War I U.S. government found itself in ownership of a vast merchant fleet capable of carrying a substantial share of the country's ocean borne trade. The Emergency Fleet Corporation's shipbuilding program was subjected to charges of waste and inefficiency for paying outlandishly high prices and for continuing the program long after hostilities had ended. By the end of 1919, most normal shipping markets had returned and there was growing pressure to get the government out of the shipping business. A bill, now commonly referred to as the "Jones Act," sponsored by then chairman of the Senate Committee on Commerce, Senator Wesley Jones, sought to build a new basis for assuring the continued existence and vitality of the U.S. merchant marine.

The Jones Act, formally the Merchant Marine Act of 1920, defined the maritime goals of the U.S.: "It is hereby declared the policy of the United States to do whatever may be necessary to develop and encourage the maintenance of a merchant marine...sufficient to carry the greater portion of its commerce and serve as a naval or military auxiliary in time of war or national emergency, ultimately to be owned and operated privately by citizens of the United States." (U.S. DOT, MARAD 2001) The Act is best known for strengthening the existing coastal shipping laws and initially attempting to include the Philippine Islands in the territories defined as coastal. Pressure from foreign shipping companies, who threatened to boycott Manila, convinced the Shipping Board to exclude the Islands, which were then under U.S. control, from cabotage protection.

As the 1920s began, the U.S. attempted to dispose of its nearly 10 million ton war-built fleet by offering its ships for sale. Even at below market prices the U.S. was not able to sell off the majority of its ships. This indirect subsidy made quality ships available to American operators at extremely low prices, which resulted in increased U.S. presence on the world's ocean trade routes.

As overseas rivals began to reappear on ocean trade routes with newer and more efficient ships of their own, the higher costs associated with operating U.S. ships began to negate the advantage of having a low cost, war-built fleet. As the war-built fleet aged and faced increasing competition from foreign carriers, the Shipping Board became desperate to find a way to sustain the U.S. industry.

The Merchant Marine Act of 1920 expanded the mail subsidy system. Contracts were to be awarded for the carriage of mails for specific trade routes, with the level of funding dependent upon the size and speed of a vessel. No criteria for determining the effect of granting subsidies or “mail contracts” on mail service itself were included in the Act. With few fixed rules attached to the legislation, the Shipping Board used the Mail Contract Appropriation as a vehicle to award maximum payments to the shipping lines.

The funds provided through mail contracts led to the building of some sixty-four new ships and the modernization of a number of others. But the program was wrought with gross mismanagement and exorbitant cost. A final report on the mail subsidy system prepared by the Maritime Commission (the successor to the Shipping Board) in 1937 determined that the Post Office Department had provided steamship companies with nearly \$200 million under subsidy contracts. This figure amounted to nearly ten times the normal rate for the amount of mail that was actually carried. (U.S. Maritime Commission 1937, p. 85)

C. MERCHANT MARINE ACT OF 1936

1. Policy Goals

In 1935, President Franklin Delano Roosevelt forwarded to Congress legislation providing outright subsidies as the way to revitalize America’s maritime industry. Roosevelt cited three reasons why the U.S. needed an adequate merchant marine. The first addressed American shipping needs in peacetime: “in time of peace, subsidies granted by other nations, shipping combines, and other restrictive or rebating methods may well be used to the detriment of American shippers.” (Gibson 2000) The second reason focused on American shipping needs in time of war when the U.S. is in a neutral position: “in the event of a major war in which the U.S. is not involved, U.S. commerce in the absence of an adequate American merchant marine might find itself seriously crippled.” (Gibson 2000) Thirdly, Roosevelt cited U.S. shipping and naval needs in a major war in which the U.S. is a participant: “in the event of war in which the U.S. itself might be engaged, American-flag ships are obviously needed not only for naval auxiliaries, but also for the maintenance of reasonable and necessary intercourse with other nations.” (Gibson 2000)

The bill that emerged, the Merchant Marine Act of 1936, reflected the New Deal determination to restructure ailing industries while directing the government to maintain high standards for American seafarers through the use of subsidies aimed at off-setting the cost differential between U.S. crewed ships compared to the less expensive crew costs on foreign-flag ships. (U.S. DOT MARAD 2001)

2. Policy Tools

The Merchant Marine Act of 1936 repeated a key tenant of the 1920 Act in calling for a fleet “sufficient to carry a substantial portion of America’s commerce,” while leaving the term “substantial” vague and citing no requirement for reaching this target. (U.S. DOT MARAD 2001) Maritime officials interpreted this phrase to mean approximately half of all U.S. foreign trade, but achievement of this goal never became realistic. Title 1 of the Act contained a policy statement that closely mirrored the preamble of the 1920 Act. Title 2 of the 1936 Act established a new five member Maritime Commission, which replaced the Shipping Board. Title 3 of the new law brought working conditions and minimum wages directly under supervision of the government for the first time. Since crew costs on subsidized ships would obviously be higher than those on foreign-flagged ships, the U.S. would pay the differential. An unforeseen consequence of this commitment was that the wage levels set for the subsidized ships eventually set the standard for wages in all U.S. shipping companies, whether receiving a subsidy or not. Title 4 terminated all mail contracts effective June 30, 1937, and transferred the duties given to the Postmaster General by the Merchant Marine Act of 1928 to the new Maritime Commission. (U.S. DOT MARAD 2001)

The heart of the 1936 Act’s new subsidy system was outlined in Titles 5 and 6. Two types of subsidies were provided for. The first of these, the Construction Differential Subsidy (CDS), provided payments for newly constructed ships built in U.S. yards provided they remained documented under the laws of the United States for at least twenty years.

The ODS was the single most important and highly contested program in recognizing and offsetting the higher costs associated with operating ships under a U.S. flag. Operators wishing to participate in this program were required to commit to purchase or build the ships needed “to meet competitive conditions” on a particular trade

route and to make a specified number of voyages on that route each year. (U.S. DOT MARAD 2001) Operators also had to replace their vessels on a regular basis (which was loosely interpreted to mean every twenty years) and all vessels receiving a subsidy were required to be less than twenty-five years old. In addition, the recipient of an ODS contract was prohibited from operating foreign registered ships, unless the Secretary of Commerce (later the Secretary of Transportation) waived any of these rules after determining it was in the public's best interest to do so.

Meeting these conditions became part of a contract between the Maritime Commission and the operator. The Commission's contractual obligation was to subsidize "the fair and reasonable cost of insurance, maintenance, repairs not compensated for by insurance, wages and subsistence of officers and crews, and any item of expense where the applicant is at a substantial disadvantage in competition with vessels of a foreign country." (U.S. DOT MARAD 2001) This subsidy was to be limited to no more than 75 percent of such eligible costs. In return, ship owners had to agree that half of any earnings that exceeded 10 percent, when averaged over a five-year period, would be turned over to the government.

Title 7 authorized the Maritime Commission to initiate construction of ships for the government's account if it determined the shipbuilding plans of private operators were insufficient. Once built, these vessels could then be sold or chartered to private operators. (U.S. DOT MARAD 2001)

Title 8 was designed to prevent the exploitation of public funds through the implementation of a series of safeguards. Shipping companies were allowed to establish and employ companies to provide ship related services so long as they were wholly owned, in which case their profits would appear on the balance sheet of the parent company and thus be subject to recapture. Subsidized companies were also restricted from entering into coastal or intercoastal trade.

The Merchant Marine Act of 1936 has proven to be a legislative landmark in the history of U.S. maritime policy. It was unprecedented in its depth and comprehensiveness and many of the policy tools it put into place are still with us today.

D. MARITIME POLICY REFORM

President Nixon's Merchant Marine Act of 1970 legislated new shipbuilding initiatives coupled with a rollback in construction subsidies under Title 5 of the Merchant Marine Act of 1936. Nixon's position was that the aging American fleet could only be replaced by American-built ships through improvements in efficiency and effective cost cutting measures. In addition, the subsidy for maintenance and repair was eliminated, but the 50 percent ad valorem tax on repairs completed in foreign shipyards was left intact. Although the result was increased cost to operators, the 1970 Act stimulated the largest peacetime private shipbuilding program in U.S. history.

Another significant change brought about by this Act was the elevation of the Maritime Administrator to the level of Assistant Secretary of Commerce and Maritime Affairs. This identified the holder of this position as the administration's chief spokesman for maritime policy.

Passed some twenty-five years after the end of World War II, the Merchant Marine Act of 1970 provided short-term invigoration to the U.S. merchant marine through the inauguration of new shipbuilding programs. Between 1970 and 1975 shipbuilders spent over a billion dollars on capital improvements to their construction yards and the cargo-carrying capacity of the privately owned deepdraft U.S. merchant fleet reached a record 21.6 million deadweight tons. (Gibson 2000, p. 201) Two subsidized companies, Waterman and Delta, constructed a series of large Lighter Aboard Ship (LASH) vessels and several existing ships were enlarged and converted to container carriers.

Yet, in the long-term, remaining restrictive policies, such as the continuing requirement that U.S.-flag ships had to be U.S. built, meant that if American shipbuilders did not succeed in lowering their costs to competitive world levels, U.S. carriers would remain dependent on government subsidies and subject to the accompanying restrictions.

When Ronald Reagan took office after the election of 1980, the size of the U.S. merchant marine engaged in international trade had fallen back to the level it had been at prior to World War I. Carrying less than 5 percent of the nation's foreign commerce, the U.S.-flagged merchant marine fleet had ceased to be a maritime power of any relevance.

As a presidential candidate, Reagan put forth an extensive nine-point maritime program to rebuild the U.S. merchant marine. Once elected, however, Reagan did nothing to implement the program. The reported reason was that the Office of Management and Budget (OMB) conducted a review of maritime programs during the presidential transition period and concluded: “National security arguments do not provide a strong justification for the provision of public assistance to the maritime industries.” (Kesteloot 2000, p. 5) OMB believed that Navy ship construction and private ship overhaul and repair work were sufficient to maintain the shipbuilding mobilization base determined to be required in a national emergency.

A product of the Clinton Administration, Congress and private industry, the Maritime Security Act of 1996 became the last significant 20th century maritime legislation with defense implications. It was signed by the President as Public Law 104-239, on October 8, 1996. In his statement of support for the law, President Clinton explained: “The Maritime Security Act will protect American jobs and maintain a U.S. presence in international maritime trade, ensuring that vital imports and exports are delivered in both peacetime and wartime. The Act reaffirms our Nation’s resolve to maintain a strong U.S.-flag presence on the high seas for our continued national security and economic growth.” (Clinton 1996)

III. CONDITIONS INFLUENCING POLICY IMPLEMENTATION

A. INTRODUCTION

The passage of the MSA represents the fundamental policy decision to amend the Merchant Marine Act of 1936 to revitalize the U.S.-flag merchant marine. The vitality of the U.S.-flag merchant marine was the issue being addressed and its revival was the objective to be pursued.

According to Sabatier and Mazmanian's model, the crucial role of implementation analysis is to identify the factors that affect the achievement of statutory objectives. Their model comprises sixteen independent variables from three different categories that influence the implementation process, as shown by Figure 1. There are several criteria that the model uses to determine the ability of a statute to favorably structure the implementation process and the effect of a variety of nonstatutory variables on the balance of support for statutory objectives.

The model suggests that implementation effectiveness and statutory coherence are a function of the extent to which the conditions in Table 1 are met.

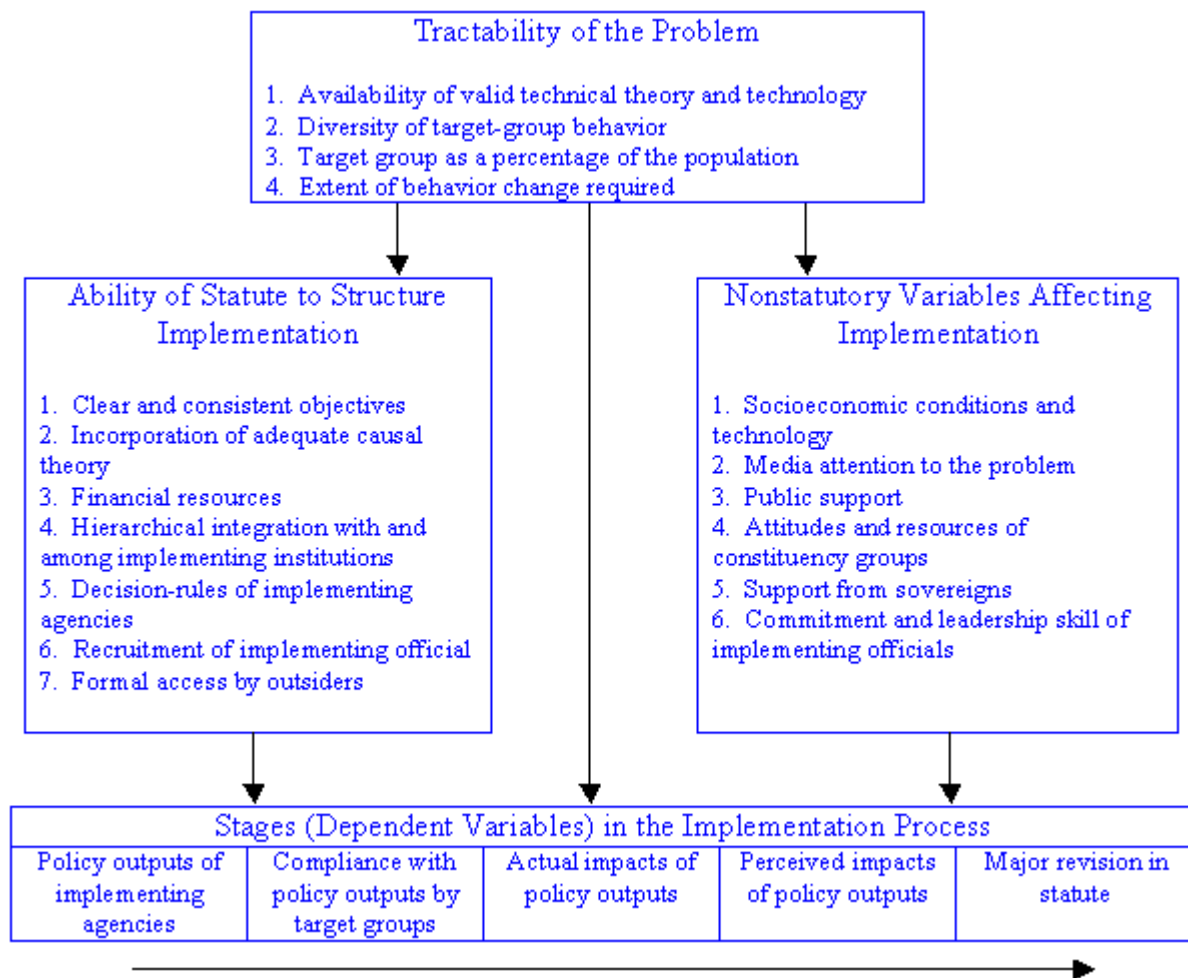


Figure 1. Flow Diagram of the Variables Involved in the Implementation Process (From: Sabatier 1995).

B. ABILITY OF THE MSA TO STRUCTURE IMPLEMENTATION

1. Clarity of Legislative Objectives

The first concept underlying this statutory variable is the precision of policy objectives. The more that a statute provides precise and clearly ranked instructions to implementing officials, the more likely it is that the policy outputs of the implementing agencies, and ultimately the behavior of target groups, will be consistent with those directives. (Sabatier 1995, p. 157)

The objective of the MSA is provided in its opening sentence: “To amend the Merchant Marine Act, 1936 to revitalize the United States-flag merchant marine...” (Public Law 1996) While the term “revitalize” is left ambiguous, section 14 of the MSA

required the Secretary of Transportation to submit to Congress a report, along with the President's budget submission for fiscal year 1997, setting forth DOT policies for the 5-year period beginning October 1, 1995, with respect to:

- fostering and maintaining a United States merchant marine capable of meeting economic and national security requirements
- improving the vitality and competitiveness of the United States merchant marine and the maritime industrial base, including ship repairers, shipbuilders, ship manning, ship operators, and ship suppliers
- reversing the precipitous decrease in the number of ships in the United States flag fleet and the Nation's shipyard and repair capability
- stabilizing and eventually increasing the number of mariners available to crew United States merchant vessels
- achieving adequate manning of merchant vessels for national security needs during a mobilization
- ensuring that sufficient civil maritime resources will be available to meet defense deployment and essential economic requirements in support of our national security strategy
- ensuring that the United States maintains the capability to respond unilaterally to security threats in geographic areas not covered by alliance commitments and otherwise meets sealift requirements in the event of crises or war
- ensuring that international agreements and practices do not place United States maritime industries at an unfair competitive disadvantage in world markets;
- ensuring that Federal agencies promote, through effective application of laws and regulations, the readiness of the United States merchant marine and supporting industries
- any other relevant maritime policies. (Public Law 104-239)

Then Secretary of Transportation, Rodney E. Slater, submitted the required report to Congress in May 1998. (U.S. DOT MARAD 1998) Subsequent reporting requirements are not delineated in the MSA.

Closely related to the specificity or precision of statutory objectives is the ranking that the new objectives are given within the totality of the implementing agency's programs. (Sabatier 1995, p. 157) The MSA tasks the DOT with implementation but does not rank attainment of its objectives relative to the myriad of programs within the Department. MARAD is DOT's implementing agency for the MSA. MARAD's mission

to “foster a safe and environmentally sound maritime transportation system that promotes national security and economic growth” and goals of “assuring an intermodal sealift capability to support vital national security interests,” “enhancing the competitiveness of the U.S. shipyard industry (including repair and related industries),” “improving intermodal transportation system performance by applying advanced technology and innovation,” and by “increasing the U.S. maritime industry’s participation and foreign trade, and cargo and passenger movement in domestic trade” (U.S. DOT MARAD 2002, p. 1) are consistent and inherently tied to the “revitalization” objective and reporting requirements imposed upon the DOT as cited in the MSA.

2. Causal Theory

The causal theory incorporated within the MSA for attaining the statute’s objective of “revitalization” is based upon the awarding of direct payments to carriers who agree to maintain enrollment and eligibility in the MSP. (Public Law 104-239) That is, the principle causal linkage between government intervention and the attainment of the legislative objective is through financial compensation. The theory is based upon the cost differential between maintaining a U.S.-flag versus a foreign registry, and the premise that government subsidies can solve the problem of decline in the U.S. merchant marine.

3. Financial Resources Available for Implementation

A threshold level of funding is necessary for there to be any possibility of achieving statutory success. (Sabatier 1995, p. 158) The MSA authorized for appropriation \$100 million for fiscal year 1996 and such sums as necessary, not to exceed \$100 million for each fiscal year thereafter through fiscal year 2005. (Public Law 104-239) The Secretary of Transportation was given authority under the Act to enter into annually renewable operating agreements with eligible vessel owners as a condition of including any vessel in the MSP fleet, subject to the availability of subsequent annual appropriations for fiscal years beyond 1996. (Public Law 104-239)

The MSA provided for payments of \$2.3 million for fiscal year 1996 and \$2.1 million for each of the nine fiscal years thereafter in which an agreement is in effect to the contractors for each vessel covered by an operating agreement. Because the MSA did not come into effect until FY 1997, the payments of \$2.3 million were never awarded and

ships with operating agreements were paid at the rate of \$2.1 million beginning with the first agreements approved in January, 1997. (GAO 1997, p. 74) This level of funding provides for agreements with up to 47 vessels. The \$2.1 million payment is a flat fee paid in monthly installments throughout the life of the program and does not make provisions for inflation or increases in ship operating costs.

In 1997, the General Accounting Office (GAO) estimated that annual crew costs alone for a commercial ship operating under U.S. registry exceed those for foreign registry operation with the next highest crew cost by \$2.4 million. (GAO 1997) Much of this disparity stems from the higher standards for health, safety, and employment in the higher wages and benefits paid to U.S. seamen as compared to what is paid to their foreign counterparts. (Hearing before U.S. House of Representatives May 25, 1993) While the country of registry has jurisdiction over the internal affairs of a ship, once a foreign seafarer signs onto a foreign-flag vessel, that seafarer is controlled by the maritime labor code of the country of registry. In many of the flag of convenience registries there is little or no interest in enforcing their maritime labor code nor the administrative capability of doing so. (Hearing before U.S. House of Representatives July 20, 1993) Additional disparities exist between U.S. and many foreign carriers in the areas of operating and capital costs, U.S. Coast Guard regulations that exceed international standards and thus impose higher costs on U.S.-flag vessels than those imposed upon foreign-flag competitors, and a higher tax burden. (Hearing before U.S. House of Representatives May 25, 1993)

The \$2.1 million annual MSP subsidy covers 13 percent of the \$16.15 million in annual costs associated with a typical 4,000 twenty-foot equivalent unit (TEU) U.S.-flag containership. The U.S.-flag cost disadvantage after inclusion of the MSP payment is 11 percent, or \$1.78 million, when compared to a typical equivalent 4,000 TEU foreign-flag vessel built with after-tax funds. This figure escalates to a 25 percent, or \$4.0375 million, cost disadvantage when considering a foreign vessel built with pre-tax funds. (Interim Report 1999)

Given the resources provided and allocation requirements within the MSA there exists a deficiency in funding the causal theory.

4. Hierarchical Integration Among Implementing Institutions

The absence of numerous semiautonomous bureaucracies and veto/clearance points provides for a centralized approach to the implementation of national policy and is conducive to statutory objective attainment. (Sabatier 1995, p. 159) MARAD, under the Department of Transportation, is the sole MSA implementing institution.

The Secretary of Transportation is required under the MSA to consult with the Secretary of Defense and MSP contractors in establishing basic terms under which a contractor for a vessel covered under an operating agreement shall make available commercial transportation resources and services upon request by the Secretary of Defense during time of war, national emergency, or for reasons of national security. (Public Law 104-239)

Under the MSA, MARAD shares responsibility for determining military utility with the Department of Defense (DOD). The Secretary of Transportation may waive certain aspects of vessel eligibility requirements for acceptance into the MSP only after consultation with the Secretary of Defense in determining that a vessel is militarily useful for meeting the sealift needs of the United States with respect to national interest or national emergencies. (Public Law 1996) In considering DOD criteria for military usefulness MARAD established the use of the Joint Strategic Capabilities Plan (JSCP) definition of “military useful” in the final rule to define the type of vessel utility that would qualify a vessel as being eligible for the MSP. (U.S. DOT, MARAD July 15, 1997 p. 37734)

5. Decision Rules of MARAD

A statute can further aid in the implementation process by stipulating the formal decision-rules of the implementing agency. (Sabatier 1995, p. 159) The MSA is conducive to this variable in that vessel enrollment eligibility requirements under the MSP are specifically delineated within the statute. (Public Law 104-239)

The criteria for award of operating agreements are also delineated and prioritized within the statute. Operating agreements are awarded to each person submitting an eligible request within a priority that bears approximately the same ratio to the total number of vessels in that priority, giving preference to vessels constructed in the United

States. (Public Law 104-239) The maritime industry submitted comments to MARAD regarding rounding problems in the prorating process due to the possibility of applications of eligible vessels exceeding available slots in the MSP. In response, MARAD noted that according to the MSA, if the number of vessels eligible within a priority exceeds the available funding for the priority, the number of awards to each person shall be made in “approximately” the same ratio as the number of vessels applied for in the priority. (Public Law 104-239) MARAD interprets this language within the MSA as granting MARAD latitude within the process to round awards up or down, as needed, to correct rounding problems and adjust awards. (U.S. DOT, MARAD July 15, 1997, p. 37735)

In response to congressional inquiries concerning the selection process for the MSP, the GAO evaluated whether changing the selection process to permit owners to compete, rather than apply for available slots could reduce the MSP program costs. The GAO review focused on (1) the potential impact of qualifying vessels, program costs, and existing agreements; and (2) the views of DOT and DOD officials on making such a change to the selection process. (GAO 1997)

The GAO noted that opening up the selection process to competition would not increase the pool of qualified applicants or the number of eligible vessels without a change in the eligibility and selection criteria. It was also unable to determine whether competitive selection would result in bids lower than the \$2.1 million annual MSP payments and stipulated that unilateral changes to the program could lead to legal challenges by vessel owners with whom the government has contractual agreements. Additionally, the GAO noted that neither DOT nor DOD favor changes to the established selection process and cited their concern that a competitive selection process would not result in lower program costs, could actually result in vessel owners withdrawing from the program to operate their vessels under a less costly foreign registry, and that such actions could result in a loss of assets needed in a time of national emergency. (U.S. DOT, MARAD 1997)

The specification of MSP eligibility requirements through legislation allows MARAD to make determinations that are consistent with the statutory objectives with

respect to military usefulness. The prorating of awarding agreements is left solely to the discretion of MARAD when the number of vessels eligible within a priority exceeds the funding available for the priority. While an argument can be made that MARAD's discretionary authority in the area of prorating awards provides an avenue for potential abuse and subsequent litigation, no such claim or filing is on record.

6. Commitment of Implementing Official and Agency

No matter how well a statute structures the formal decision process, the attainment of its objectives is unlikely unless officials in the managing organizations are strongly committed to the attainment of those objectives. Assigning the responsibility for statutory implementation to an agency whose policy orientation is consistent with the statute, that will accord the new program a high priority, and that perceives the new mandate to be compatible with its traditional orientation are favorable mechanisms available to statutory framers in assuring that implementing officials have requisite commitment to statutory objectives. (Sabatier 1995, p. 160)

As an agency of DOT, MARAD has primary responsibility for ensuring the availability of efficient water transportation services to shippers and customers. It also seeks to ensure that the United States enjoys adequate shipbuilding and repair service, efficient ports, effective intermodal water and land transportation connections, and sufficient intermodal shipping capacity for use by DOD in time of national emergency. (U.S. DOT, MARAD February 11, 2002, p. 2)

Both the Secretary of Transportation and the Maritime Administrator are appointed positions requiring congressional confirmation. At the time of the passage of the MSA, then Transportation Secretary Rodney Slater had made national security one of his five strategic goals for DOT. Maritime Administrator Clyde J. Hart stated to the Oversight Panel on the Merchant Marine of the House Armed Services Committee that "MARAD recognizes the importance of sealift readiness and a strong U.S.-flag fleet embodied in the MSP." (U.S. DOT, MARAD March 16, 1999)

As part of the Bush Administration's policy to consolidate the management of like programs and achieve greater efficiencies, the President's 2002 budget submission proposed the transfer of MSP management and funding from MARAD to DOD. (U.S.

DOT, MARAD July 13, 2001) The House Armed Services Committee cited insufficient justification for transferring a program that by all accounts is currently being managed effectively. In addition, the committee noted a lack of evidence that such a transfer would result in any cost savings. Therefore, the committee transferred the \$98.7 million in MSP funding from the National Defense Sealift Fund back to MARAD. (Report of the Armed Services Committee September 2001)

Current Transportation Secretary Norman Y. Mineta has referred to the U.S. marine transportation system as one of America's most important assets. (U.S. DOT October 2001) On November 30, 2001 the U.S. Senate unanimously confirmed current Maritime Administrator Captain William G. Schubert. (U.S. DOT, MARAD November 30, 2001) Captain Schubert has publicly acknowledged his support and efforts to build consensus on the reauthorization of the MSP. (American 2002)

7. Formal Access by Outsiders

Not only can a policy structure the implementation process through the design characteristics of implementing organizations, it can also affect the participation of the potential beneficiaries and target groups of the program. (Sabatier 1995, p. 160) The target groups of the MSA are the vessel owners. The beneficiaries are both the owners and maritime labor unions. Neither of these groups have problems with legal standing nor do they lack the financial resources or incentives to pursue their case in court if their position is at odds with agency decisions.

C. NONSTATUTORY VARIABLES AFFECTING IMPLEMENTATION

1. Socioeconomic Conditions

Variations over time and among governmental jurisdictions in social and economic conditions can substantially affect the political support for statutory objectives and policy outputs of implementing agencies and eventually the achievement of statutory objectives. (Sabatier 1995, p. 162)

These variations in socioeconomic conditions can affect perceptions of the relative importance of the problem addressed by a statute when other social problems become relatively more important over time, thus threatening to diminish political support for the allocation of scarce resources to the original statute.

If socioeconomic factors are relevant to the MSA they are apt to have only a minor impact on the ability to achieve success of the statutory objectives of the MSA. As the economy has slowed down, pressure is exerted on the allocation of scarce resources. One form of that pressure is likely to take the form of support for programs that are beneficial towards labor, including wage subsidies.

2. The Amount and Continuity of Media Attention

The mass media can be a crucial intervening variable between changes in socioeconomic conditions and the perceptions of those changes by both the general public and political elites. (Sabatier 1995, p. 163) The general tendency of the media is to focus on a topic for a short period of time and then move on to other newsworthy issues.

President Clinton signed the MSA with little formality. A press release accompanied the signing, citing his Administration's commitment to a strong U.S. merchant marine. (Clinton 1996) Since then, media coverage outside of industry publications has been sparse. While recent terrorist events have brought transportation assets and intermodalism to the attention of the general media, no significant relationship appears to exist between the extent or continuity of media coverage and implementation of the MSA. It may be the case that MSA proponents can use the increased media attention to strengthen their position, based on the assumption that a U.S.-flag implies heightened security.

3. Variations over Time in Public Support for Statutory Objectives

Interest among the general public in a statute or the problem it addresses tends to be cyclical. This can interfere with achieving sustained political support. Public opinion can influence the implementation process by affecting the political agenda and legislative issues that are addressed by lawmakers. (Sabatier 1995, p. 164)

The MSA affects narrow interests, primarily vessel owners and the maritime industry labor force. These interests are centralized in major coastal shipping ports, implying severe limits on the ability of these interests to generate and sustain support from the general public.

4. Changes in Attitudes and Resources of Constituency Groups

A dilemma confronting the proponents of a regulatory program is that public support for their program will tend to decline over time. (Sabatier 1995, p. 164) Statutes are often passed at the height of public concern with an issue. This concern wanes as the media and public turn their focus to other matters.

Constituency groups that are proponents of the MSA include the vessel owners and maritime labor unions. Such groups can intervene in the actions of the implementing agency by commenting on proposed decisions and through appeals to its legislative and executive sovereigns. The relationship between constituency group support and implementation success produces a reasonably strong fit with respect to the MSA.

5. Support from Sovereigns

The sovereigns of an implementing agency are those institutions which control its legal and financial resources. These include the legislature and its policy and fiscal committees, the chief executive, and the court system. Sovereigns can affect the policies pursued by an implementing agency through both informal oversight and formal changes in the agency's legal and financial resources. When an intergovernmental subordinate is faced with conflicting directives from its intergovernmental superiors and its coordinate sovereigns, it will ultimately lean toward the direction of the entity that has the greatest affect on its legal and financial resources over the longest period of time. (Sabatier 1995, p. 165)

DOT is a hierarchically superior agency in relation to MARAD. However, the most critical sovereign with respect to MARAD and its role as the implementing agency of the MSA is the legislative branch and its relevant committees. These committees include the Commerce, Science and Transportation Committee of the U.S. Senate and the Oversight Panel on the Merchant Marine of the Armed Services Committee of the U.S. House of Representatives. On the national level, operating agreements under the MSA are effective for only one fiscal year, but are renewable, subsequent to the availability of appropriations, for each subsequent year through fiscal year 2005. (Public Law 104-239) The requirement for an annual appropriation before Congress each year provides the program visibility while maintaining the oversight of the legislative sovereigns. And

while DOT is a hierarchically superior agency, the legislative branch maintains the power of the purse over MARAD with respect to the MSA.

6. Commitment and Leadership Skill of Implementing Official

This variable is affected by the direction and ranking of the statutory objectives in the implementing official's preference ordering and their skill in realizing those preferences through their ability to go beyond what could reasonably be expected in using available resources. Skill in using available resources falls under the umbrella of an implementing official's leadership and comprises both political and managerial elements. (Sabatier 1995) Inherent in this concept is the official's ability to develop effective working relationships with the sovereigns having the greatest affect and control over the relevant legal and financial resources and to skillfully present the agency's case to the media.

The current maritime administrator, William G. Schubert, and his predecessor, Clyde J. Hart Jr., have publicly commented on their support and commitment towards the MSA and its objectives. But commitment to statutory objectives contributes little to their attainment unless accompanied by skill in using available resources to that end. This embodiment of leadership comprises both a political and a managerial element yet remains a rather elusive concept. While its importance is inherent, it is extremely difficult to predict whether specific individuals will go beyond what is reasonably expected in using available resources in support of statutory objectives. (Sabatier 1999)

IV. TRACTIBILITY AND IMPLEMENTATION STAGES

A. TRACTABILITY

Inherent tractability refers to the solvability of the problem being addressed. Tractability is evaluated by assessing the difficulty in handling and measuring change, the diversity of the prescribed behavior, the percentage of the total population that the target group represents, and the extent of change required. These variables suggest that problems are most tractable if measurement of change in the seriousness of the problem is feasible and there is minimal variation in the behavioral practices that cause the problem. Additional aspects conducive to tractability are ease in identifying the target group and modest amounts of required behavioral change. (Sabatier 1995)

1. Measuring Change

The MSA required DOT, hence MARAD, to submit to Congress a Maritime Policy Report along with the President's budget submission for fiscal year 1997. This report was to set forth MARAD's policies for a 5-year period beginning October 1, 1995, with respect to ten specifically delineated items commensurate with the MSA objective of revitalization of the U.S. merchant marine. (Public Law 104-239) MARAD adopted these items and incorporated them into specific maritime programs to attempt to satisfy the requirements set forth in the MSA. MARAD submitted this five-year plan (A Report to Congress on Maritime Policy) in May 1998. (U.S. DOT, MARAD 1998) The MSA did not stipulate further reporting requirements.

Inherent difficulty arises when measuring change with respect to these policies. For example, how does one measure a goal like "ensuring that international agreements and practices do not place United States maritime industries at an unfair competitive disadvantage in world markets?" (Public Law 104-239) Overly broad goals hinder the ability of measuring and monitoring progress towards their attainment. (Sabatier 1995)

Section 208 of the Merchant Marine Act of 1936, as amended, requires the Maritime Administrator to submit a report to Congress by April 1 of each year. This report is to include the results of its investigations, a summary of its transactions, its recommendations for legislation, a statement of all receipts, and purposes for all

expenditures of the prior fiscal year. (U.S. DOT, MARAD 2001) MARAD's fiscal year 1997, 1998, and 1999 reports were submitted to Congress in May of each subsequent year respectively. MARAD's fiscal year 2000 report is dated July 2001 and was released in November 2001. (U.S. DOT MARAD November 26, 2001)

MARAD has included specifics on its programs and activities in these reports to Congress. Information required by law includes data on the acquisition of obsolete vessels, war risk insurance activities, scrapping or removal of obsolete vessels owned by the U.S., and U.S.-flag carriage of Government-sponsored cargoes. MARAD attempts to incorporate within these reports the ten goals delineated within the MSA in support of its objective of revitalization of the U.S. merchant marine.

However, attempting to measure what specifically constitutes attainment of these goals through the use of metrics is inherently problematic and is not delineated within the MSA itself. MARAD does not, nor is it specifically required to, quantitatively measure movement towards attainment of these goals in its annual reports to Congress.

2. Diversity of Target-Group Behavior

The more diverse the behavior being regulated, the more difficult it becomes to frame clear regulations and thus the less likely that statutory objectives will be attained. (Sabatier 1995) Within the MSA, the target group behavior being regulated is narrow and focused. The conduct at issue is the selection of flags for ship registration on the part of the ships' owners.

3. Target Group as a Percentage of the Population

The smaller, more definable, and isolatable the target group whose behavior needs to be changed, the more likely that political support can be mobilized in favor of a program. There is minimal variation in this variable since the commercial vessel owners are the MSA's primary target group. The maritime labor unions are a secondary target group. Having such a narrow band of target groups is conducive to enhancing the probability of statutory objective attainment. (Sabatier 1995)

4. Extent of Behavioral Change Required of Target Groups

The greater the amount of behavioral change required of target groups the more problematic becomes successful implementation. The change sought under the MSA is to revitalize the U.S. merchant marine through targeting vessel owners to halt the trend of

converting U.S.-flag vessels to foreign registries. Having such a modest amount of required behavioral change is supportive of successful implementation. (Sabatier 1995)

The extent to which statutory objectives have been or can be achieved is less than clear given the constraints in quantifying the component variable of handling change. And while the other components that comprise tractability are more tenable, there is no indication as to what constitutes either the minimum acceptable or the upper limit of possible success in terms of revitalizing the U.S.-flag merchant marine.

B. STAGES IN THE IMPLEMENTATION PROCESS

Analysis to this point has focused on the independent variables and generic factors affecting the implementation process. Sabatier and Mazmanian's model next provides for viewing that process in terms of dependent variables. These variable end points analyze the extent to which actual impacts conform to statutory objectives considering the political system's summary evaluation of a statute.

1. Policy Outputs of Implementing Agencies

Statutory objectives must be translated into regulations, operating procedures, specific policy decisions, and their subsequent enforcement. This process can be problematic where a statute involves several implementing agencies with varying degrees of commitment to the achievement of statutory objectives. Breakdowns in coordination and communication are often the result. (Sabatier 1995)

As the sole implementer of the MSA, MARAD is in an ideal position to implement its policies to achieve statutory objectives. The centerpiece of the MSA is the MSP. By providing subsidies to a specific number of vessels, the MSP also attempts to address the need for sufficient numbers of U.S. merchant mariners to crew U.S. vessels in the event of a contingency. Each year, MSP participants must enter into or renew an "emergency preparedness agreement" with MARAD, providing government access to the capacity of those vessels if required.

Soon after the passage of the MSA, the Secretary of Defense announced the creation of the Voluntary Intermodal Sealift Agreement (VISA), a joint program of the Departments of Defense and of Transportation. VISA provides the "emergency

preparedness agreement” contemplated by the MSA for activating MSP vessels in support of military sealift needs. (Public Law 104-239)

There are two categories of carriers participating in VISA: those who receive payments through the MSP (and must enroll in VISA) and those who do not. MSP participants in VISA must commit 100 percent of the capacity of enrolled vessels, while carriers who are not in the MSP may commit only a portion of their capacity. In both cases, the vessel operator is also required to commit a proportionate amount of other transportation resources, such as cargo handling equipment, terminal facilities, and rail cars.

A noteworthy feature of the MSP is that while the program subsidizes ships, vessel operators must make capacity available to the government in time of war, national emergency, or whenever the Secretary of Defense determines it necessary for national security. (U.S. DOT, MARAD 1998) If a particular ship is not available, the ship operator can substitute an equivalent U.S. or foreign-flag vessel. Substitute vessels can be from the participating carrier or from another with which the participating carrier has an agreement. While the MSP is designed around assured access to a core of U.S.-flag vessels, the program provides a framework in which U.S. military sealift requirements may be met by the mobilization of foreign-flag ships. (Public Law 104-239)

The composition of current vessels and owners representing the MSP is displayed in Table 1.

Behavioral compliance can be described as an assessment of the relative costs and benefits of following legal objectives. The decision to comply is a function of the probability that noncompliance will be detected and successfully prosecuted, the magnitude of sanctions, attitudes toward rule legitimacy, and the costs of compliance. (Sabatier 1995)

MSP PARTICIPANTS

American Ship Management, LLC	9 containerships
Automar International Car Carrier, Inc.	3 roll-on/roll-off vessels
Central Gulf Lines, Inc.	3 roll-on/roll-off vessels
E-Ships, Inc.	3 containerships
First American Bulk Carrier Corp.	2 containerships
First Ocean Bulk Carrier-I, II, III, LLC	3 containerships
Maersk Line, Limited	4 containerships
OSG Car Carriers, Inc.	1 roll-on/roll-off vessel
U.S. Ship Management, Inc.	15 containerships
Waterman Steamship Corporation	3 LASH vessels 1 roll-on/roll-off vessel
Total:	47 vessels

Table 1. MSP Participants.
(http://www.marad.dot.gov/programs/MSP/msp_participants.htm, February 13, 2002)

2. Target Group Compliance with Policy Outputs

In the context of this policy analysis, complying with MSP membership requirements is specified within the MSA. Any mobilization under VISA would necessarily occur only after the commercial charter market for U.S. and foreign-flag vessels had been exhausted. (Public Law 101-239) To date, the Secretary of Defense has never activated such a mobilization. It is unclear what remedies would be available to MARAD in the event of such an activation where a MSP carrier did not provide commensurate activated vessel capacity. One could speculate that such liability or sanctions may be limited to the year in question given the fact that these are annual agreements.

3. Actual Impacts of Policy Outputs

The major concern is the conformity of the impacts of the MSP to the statutory objectives of the MSA. The MSP is intended to ensure that an active U.S.-flag merchant fleet of sufficient size and composition, along with the appropriate labor force, remains in place to provide sealift in support of national security objectives. However, the program does not represent a comprehensive solution to the long, steady decline of both the U.S.-flag fleet and the number of American merchant mariners.

In 1955, the U.S. oceangoing fleet numbered 1,072 ships. (Kesteloot 1999) By 1996, the oceangoing segment of the privately owned fleet engaged in international trade comprised 281 active ships. (U.S. DOT MARAD May 1997) In 1999, MARAD introduced a new format for the presentation of U.S.-flag fleet statistics to include non self-propelled vessels. This change notwithstanding, in 2001 MARAD reported only 147 self-propelled U.S.-flag vessels operating in international trade, of which 47 were receiving MSP funding. (U.S. DOT MARAD July 2001)

To a certain extent, the decline in the number of ships has been mitigated by the increasing average size and productivity of each vessel. In 1995, 35 percent of all containerships calling at U.S. ports exceeded 4000 TEUs in size. By the year 2010, 60 percent are expected to exceed this size. The largest containerships afloat now exceed 6000 TEUs. With an increase in the average vessel size has come significant consolidation of the worldwide shipping industry due to the magnitude of investments for large, efficient vessels. (Library of Congress 1998)

It is also important to note that 36 of the 47 MSP participant vessels are containerships, considered to be the most useful type of vessel for resupply of the military in the event of war or other national security operation. An additional eight vessels provide roll-on/roll-off (RO/RO) capability, primarily useful for moving Army and Marine Corps vehicles.

An additional impact of the MSP has been reduced outlays for the U.S. government as compared with the ODS. The ODS was in effect from 1936 until replaced by the MSP in 1996. The final ODS agreement expired in September 2001. Under ODS,

vessel operators were enrolled in the Sealift Readiness Program (SRP) and committed only the vessel, without crews or terminal facilities. Ships were never activated under the SRP, allowing the government to avoid having to determine how to operate these vessels under such conditions.

Expected outlays for the MSP are capped at \$100 million per year through fiscal year 2005. In contrast, ODS payments for 1996, the last full year for that program, were \$164.7 million. (U.S. DOT MARAD May 1997) The less costly MSP ensures that crews, terminal equipment, and intermodal facilities, in addition to ships, will also be available. The MSP also removed the ODS requirement of having ships serve specific transit lanes at minimum service levels in order to qualify to receive subsidies. This restriction impeded the ability of ship operators to respond to changing market conditions. (Library of Congress 1998)

The MSP addresses the issue of sustaining sufficient numbers of U.S. citizen merchant mariners to man U.S. vessels in the event of a contingency by providing subsidies to a specific number of vessels. The slow decline in the number of U.S. merchant mariners has continued. Average monthly U.S. seafaring employment decreased from 11,205 in fiscal year 1996 (U.S. DOT MARAD May 1997) to 10,458 in fiscal year 1999, a drop of 6.7 percent. (U.S. DOT MARAD 2000) This figure was not reported in MARAD's fiscal year 2000 annual report to Congress.

Of note is that the average monthly U.S. seafaring employment figure for fiscal year 1999 showed a 1.3 percent increase from fiscal year 1998. (U.S. DOT MARAD 2000) Also, technological improvements in vessels are reducing average crew size, as has been the case onboard trains and aircraft.

4. Perceived Impacts of Policy Outputs

Consolidations within the global shipping industry since the passage of the MSA have raised concerns about the statute's effectiveness as a means of ensuring the viability of a U.S.-flag merchant marine. During 1997, Neptune Orient Lines (NOL), a Singapore based shipping firm, purchased American President Lines (APL). At the time, APL had nine vessels enrolled in the MSP. Prior to the announcement of its sale, MARAD agreed to allow APL to transfer its subsidy contracts if certain conditions were met. APL

announced it intended to transfer these ships to trusts that would register the ships under the U.S.-flag. The trusts would provide charters to the newly formed American Ship Management Company (ASM), which would manage the ships and collect the subsidies. (Gibson 2000)

That same year, Lykes Lines, which was in bankruptcy, was sold, along with its three MSP vessels, to CP Ships, the maritime division of Canadian Pacific Limited. In 1999, Crowley American Transport sold its three container-RO/RO ships to Automar International Car Carriers (AICC). The formation of American Automar, Inc., a U.S. subsidiary of AICC, enabled these vessels to continue to receive an MSP subsidy. (U.S. DOT MARAD September 21, 1999) This took Crowley, one of the largest U.S.-flag shipping firms, entirely out of the MSP.

Also in 1999, Sea-Land, the largest U.S. shipping firm with 15 containerships enrolled in the MSP, was sold to Maersk Line of Denmark. Once more, Maersk's newly formed U.S. subsidiary, U.S. Ship Management, Inc. (USSM) was allowed to time charter the vessels to Maersk. (U.S. DOT MARAD December 9, 1999)

Finally, in 2000, P & O Nedlloyd Limited (PONL), a corporation organized in the United Kingdom, acquired Farrel Lines Inc. Farrel's three MSP operating agreements were transferred to E Ships, Inc., a new U.S. subsidiary of PONL. (U.S. DOT MARAD July 2001)

These arrangements have allowed MSP enrolled vessels to continue to receive subsidies by maintaining a U.S.-flag and by classifying the newly formed subsidiaries as "documentation U.S. citizens." (U.S. DOT MARAD September 27, 1999) The resulting perceived impact of this policy output is that MARAD, in effect, is subsidizing foreign shipping firms to maintain U.S.-flag vessels.

National security objectives have consistently been a significant component of merchant marine legislation. Current U.S. maritime policy as a means of ensuring adequate national defense sealift capability has not evolved to match the advent of an increasingly global maritime shipping industry. This policy is built upon the premise that non-U.S.-flag ships, crewed by foreign nationals, are not a reliable means of sealift for military requirements.

This premise was challenged during Operation Desert Shield/Storm where the Military Sealift Command (MSC) shipped 15 million tons of cargo in support of the largest military effort conducted by the United States since the Vietnam War. By the opening of the ground war in January 1991, MSC had chartered 21 U.S.-flag ships and 162 foreign-flag vessels to supplement 106 ships under its own control. (Lovett 1996)

The defense rationale for some form of support for the U.S. merchant marine has historically carried great rhetorical weight. However, while military requirements clearly necessitate the deployment of personnel, equipment, and supplies, the need for these movements to be made on protected and subsidized U.S.-flag merchant vessels is far less clear.

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V. CONCLUSIONS AND RECOMMENDATIONS

A. SUMMARY

The Sabatier-Mazmanian framework provides a useful structure for the examination of different kinds of policies and programs, linking objectives to issues affecting implementation. The findings of this analysis support the statutory coherence hypothesis and reinforce the importance of policy formulation to all stages of the policy process.

B. RESEARCH FINDINGS

Recognizing that many factors affect implementation, policymakers have a substantial capacity to influence policy outputs. While each aspect is a separate variable under the Sabatier-Mazmanian model, these aspects can be aggregated. For a number of the critical variables there exists a relationship between statutory coherence and implementation success. Ideally it would be feasible to quantify the independent variables and level of implementation success in such a way that the relative influence of each could be determined. This determination would prove to be most valuable for policymakers.

1. Critical Factors

In this analysis, the clarity in framing of objectives, the tractability in handling and measuring change, the causal theory being incorporated, and financial resources available are especially important.

The most essential requirement is that there be clear and definable objectives against which to measure policy success. As previously discussed, the objective of the MSA is to “amend the Merchant Marine Act, 1936 to revitalize the United States-flag merchant marine.” (Public Law 104-239) While not defining the term “revitalize,” section 14 of the MSA ties this objective to ten delineated items commensurate with the notion of revitalization and setting forth MARAD policies. Inherent difficulty arises when measuring change with respect to these policies and their overly broad goals. In the absence of tractability, measurement as to what specifically constitutes attainment of statutory success with respect to these policies is intrinsically problematic.

Also crucial is the validity of the causal theory incorporated into the statute. The causal theory incorporated within the MSA for attaining the statute's objective of "revitalization" is based upon the awarding of direct payments to carriers who agree to maintain enrollment and eligibility in the MSP. (Public Law 104-239) That is, the principle causal linkage between government intervention and the attainment of the legislative objective is through the provision of monetary subsidies. While this is a valid theory, the funding levels it would require are much greater than those provided for in the statute.

2. Impact

Sealift has historically been a critical part of U.S. national security requirements. Its role in future conflicts is less certain. Nonetheless, U.S. maritime policy is predicated on maintaining a viable U.S.-flag merchant marine fleet capable of providing reliable and sufficient sealift for the U.S. military in the event of war or other major military contingency. The design of the MSP (though not its stated purpose) and recent use of foreign-flag vessels by the Military Sealift Command for military purposes suggest a qualified but necessary retreat from the assumptions associated with the size of the U.S.-flag fleet. Current legislation authorizes payments that will keep a few ships engaged in foreign commerce operating under a U.S.-flag but will not support a fleet significantly larger than the current inventory.

The MSA is a short-term policy that has not revitalized the U.S.-flag merchant marine. However, it has provided a useful mechanism for activation of vessels and access to associated intermodal capabilities and infrastructures by the government under certain circumstances. Additionally, the MSA has reduced the annual expenditures incurred under its predecessor program, the ODS, in order to maintain a core fleet of U.S.-flag commercial vessels, while gaining the government access to a skilled and active mariner employment base.

Consolidations within the global shipping industry are likely to continue. The impact on the U.S. from continued globalization in the maritime industry comes not so much from the extent of dependence on it but rather from the concentration of dependence on a few providers.

C. CONCLUSIONS AND RECOMMENDATIONS

1. **The continuing decline in the size of the U.S. commercial fleet and recent consolidations within the global shipping industry confirm the need for a thorough review of U.S. maritime policy.**

Such a review should explicitly consider the evolutionary global nature of the maritime shipping industry and how the U.S. can most effectively leverage its access to sealift capabilities through its maritime policy to meet national defense requirements.

2. **Expanding the causal theory to bridge the funding gap between what is provided for under current MSA subsidies and the operating and capital costs of maintaining a significantly larger U.S. registry warrants consideration.**

These cost drivers include:

- U.S. Coast Guard regulations that exceed international standards and thus impose higher costs on U.S.-flag vessels than those imposed upon foreign-flag competitors
- The requirement that ships engaged in U.S. cabotage trade be domestically built
- Customs duties levied on non-emergent foreign repairs to U.S.-flag ships
- Taxing the earnings of U.S.-flag ships engaged in international trade commensurate with those of a domestic operation
- Taxing crew wages on voyages in foreign commerce
- Crew sizing requirements that exceed those of foreign-flag competitors

Most vessels operating under a foreign-flag engaged in international maritime trade either pay no taxes or have the ability to defer income tax payments by setting funds aside for pending vessel modernization or new construction. It is also common practice in many countries to exempt part or all of a crewmember's wages from taxation. Historical U.S. policy has been to compensate for this competitive disadvantage by subsidizing wages and limiting competition for U.S. cargoes.

3. Evaluate the incorporation of second or open registries.

Other traditional maritime nations, such as Norway, have adopted the notion of second or open registries. This has allowed vessels to be registered with fewer restrictions and a reduced associated tax burden when compared to that nation's standard registration process. These types of registries represent a compromise between traditional flagging practices and flags of convenience.

4. Maritime policy needs to evolve to match the advent of an increasingly global shipping industry.

The predisposed and historic assumption of a link between U.S. national security and a large U.S.-flag merchant marine fleet warrants reassessment given the fact that the few remaining successful U.S. shipping firms are members of large consortia.

Current U.S. maritime policy represents the continuation of a "bandage" solution to the hemorrhaging of U.S.-flag vessels to more profitable foreign registries and is in need of a new approach. The accepted practices of the international maritime market must be acknowledged and taken into account.

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